

### Support for Learning

*“Pupils should be given opportunities to apply and develop their ICT capability through the use of ICT tools to support their learning in subjects”.*

*(the National Curriculum 2000)*

The use of ICT needs to add value to teaching and learning in **Science**. Identifying “when, when not and how” to use ICT in a way that enhances pupils’ learning has implications for the teacher.

ICT enables pupils to observe, record, measure, and interpret investigation results in a variety of ways. Pupils can use sensors, for example, to record temperature changes, or to compare sounds made under different conditions. ICT encourages creative ways of thinking, as pupils learn to ask ‘what if?’ questions, predict outcomes and evaluate evidence.

Using ICT, pupils can access information and communicate their findings. Pupils can improve the planning, presentation and evaluation of their work using text, graphs, pictures, video, and model mapping. Through simulations and animations, pupils are able to develop their knowledge and understanding of physical processes, for example, by studying models of the solar system.



### ICT opportunities in the Science programme of study

Through Key Stages 1 and 2, pupils progress from taking part in practical scientific activities to building more abstract models of real situations. From using simple drawings to communicate scientific information, they learn to use more conventional diagrams and graphs.

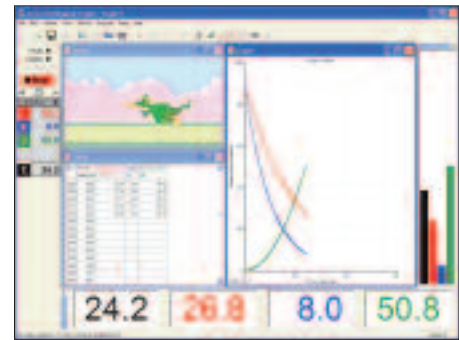
In developing their scientific understanding, pupils can use hardware and software to:

- help them to record results, and produce tables and graphs, for example, in analysing pulse rates before and after exercise
- measure sound, light or temperature and discuss their results
- classify information
- create, analyse, graph and look for patterns in data, for example, using a database or spreadsheet relating to healthy eating
- sort objects into groups, for example, material properties
- present their findings and scientific ideas (word processor, presentation package, model mapping package).

# LOGOTRON PRODUCTS FOR SCIENCE

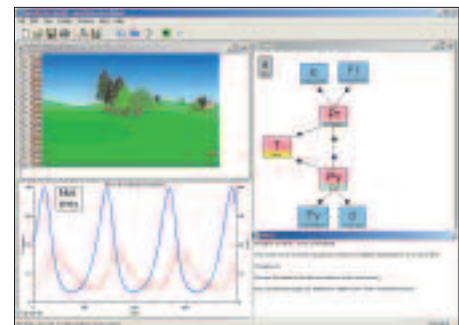
## Junior Datalogging Insight **KS2-3 P3-S2**

The definitive datalogging software, Junior Datalogging Insight supports pupils throughout the science curriculum. Pupils can collect & explore and display & analyse data gathered from a wide range of datalogging interfaces.



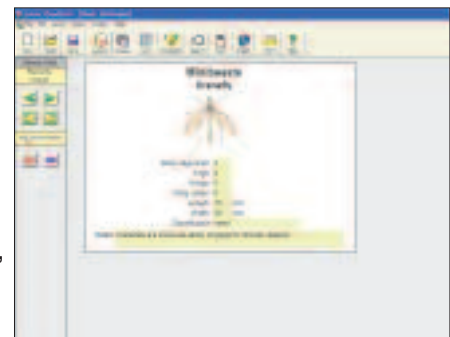
## Junior Simulation Insight **KS2-3 P3-S2**

Junior Simulation Insight helps pupils explore and investigate the primary science curriculum. Using pre-built animated models or using the software to build their own models pupils can represent real or imaginary situations and use the data they collect to increase their scientific understanding.



## Junior Viewpoint **KS2-3 P3-S2**

Junior Viewpoint is the UK's most popular datahandling program for schools. It gives you access to dozens of datafiles and activity sheets ready-made for busy teachers to use across the curriculum. The Science related activities include: Natural Forces, Plants & Animals, Materials, Environment, Solar System, Junior Olympics, Dinosaurs, Minibeasts, and others.



## Thinking with Pictures **KS1-3 P1-P6**

Model mapping provides a perfect medium for learning, teaching, organising information, constructing meaning and understanding concepts in Science. Thinking with Pictures harnesses this potential and extends the learning opportunity in Science lessons. The environment is ideal for whole class and individual learning and lends itself to learning, understanding and revision across all Science topics at Key Stage 2 and 3. A large number of templates are designed to organise understanding in Science; and curriculum-relevant content makes this immediately usable in lessons.

